

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 07/25/2006

| APPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------|---------|------------|-----------------------|---------------------|------------------|--|
| 09/687,484 | | 10/13/2000 | Donald C. Jackson | 0055-0014 | 9376 | |
| 58563 | 7590 | 07/25/2006 | | EXAMINER | | |
| HARRITY | | • | PHAN, MAN U | | | |
| 11350 RANI SUITE 600 | JOM HIL | LS ROAD | ART UNIT PAPER NUMBER | | | |
| FAIRFAX, | VA 2203 | 30 | | 2616 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | SV | | | | |
|---|---|---|--|------|--|--|--|--|
| | | Application No. | Applicant(s) | | | | | |
| Office Action Summary | | 09/687,484 | JACKSON ET AL. | | | | | |
| | | Examiner | Art Unit | | | | | |
| | | Man Phan | 2616 | | | | | |
| Period fo | The MAILING DATE of this communication aportion or Reply | pears on the cover sheet w | ith the correspondence address | | | | | |
| WHIC - Exte afte - If NC - Failt Any | HORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D ensions of time may be available under the provisions of 37 CFR 1. or SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period ure to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | PATE OF THIS COMMUNI 136(a). In no event, however, may a will apply and will expire SIX (6) MOt e, cause the application to become Al | CATION. reply be timely filed NTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed on 30 h | <i>l</i> lay 2006. | | | | | | |
| 2a)⊠ | This action is FINAL . 2b) This action is non-final. | | | | | | | |
| 3)[| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| | closed in accordance with the practice under | Ex parte Quayle, 1935 C.E |). 11, 453 O.G. 213. | | | | | |
| Disposit | tion of Claims | | | | | | | |
| 4)⊠ | Claim(s) <u>1-8,16-22 and 25-68</u> is/are pending in the application. | | | | | | | |
| | 4a) Of the above claim(s) <u>42-66</u> is/are withdrawn from consideration. | | | | | | | |
| 5)⊠ | ☑ Claim(s) <u>36-41</u> is/are allowed. | | | | | | | |
| 6)⊠ | ☑ Claim(s) <u>1-8, 16-19, 22, 27-31, 34-41</u> is/are rejected. | | | | | | | |
| · | Claim(s) 20,21,25,26,32 and 33 is/are objecte | | | | | | | |
| 8)[| Claim(s) are subject to restriction and/o | or election requirement. | | | | | | |
| Applicat | ion Papers | | | | | | | |
| 9)[| The specification is objected to by the Examine | er. | | | | | | |
| 10)[| The drawing(s) filed on is/are: a) acc | cepted or b) objected to | by the Examiner. | | | | | |
| | Applicant may not request that any objection to the | drawing(s) be held in abeya | nce. See 37 CFR 1.85(a). | | | | | |
| | Replacement drawing sheet(s) including the correct | ction is required if the drawing | (s) is objected to. See 37 CFR 1.121(| (d). | | | | |
| 11) | The oath or declaration is objected to by the E | xaminer. Note the attache | d Office Action or form PTO-152. | | | | | |
| Priority | under 35 U.S.C. § 119 | | | | | | | |
| • | Acknowledgment is made of a claim for foreign All b) Some * c) None of: | | § 119(a)-(d) or (f). | | | | | |
| | 1. Certified copies of the priority documen | | | | | | | |
| | 2. Certified copies of the priority document | • | ·· —— | | | | | |
| | 3. Copies of the certified copies of the prior | • | received in this National Stage | : | | | | |
| * 9 | application from the International Burea See the attached detailed Office action for a list | , , , , | received | | | | | |
| • | see the attached detailed Office action for a list | tor the certified copies flot | received. | | | | | |
| Attachmer | nt(s) | | | | | | | |
| | ce of References Cited (PTO-892) | | Summary (PTO-413) | | | | | |
| | ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | _ | s)/Mail Date nformal Patent Application (PTO-152) | | | | | |
| | er No(s)/Mail Date | 6) Other: | | | | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Application/Control Number: 09/687,484 Page 2

Art Unit: 2616

Response to Amendment and Argument

1. This communication is in response to applicant's 05/30/2006 amendment in the application of Jackson et al. for a "method and apparatus for localized voice over internet protocol usage" filed 10/13/2000. This application claims benefit from Provisional Application 60/219,911 dated 07/21/2000. This application is a Request for Continued Examination (RCE) under C.F.R. 1.114 filed on June 13, 2005. The proposed amendments to the claims and remark have been entered and made of record. Claims 9-15, 23-24 have been canceled per Applicant's requested, claims 1, 6, 19-22, 25-26, 29, 33, 36-41 have been amended, and claims 67-68 have been added. Claims 1-8, 16-22, 25-68 are pending in the application.

In view of applicant's amendment to amend the specification to obviate the objection, examiner has withdrawn the Objections of record.

- 2. Applicant's amendment and argument to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C. 103 as discussed below. Applicant's argument with respect to the pending claims have been fully considered, but they are not persuasive for at least the following reasons.
- 3. Applicant's argument with respect to the restriction by original presentation (page 19) that "not one of the claims of group I includes features related to a switching network

Art Unit: 2616

that has a switch which establishes a path between a source and destination, route information...". The Applicant's attention is directed to Fig. 3 (specification, page 11 plus) that best described the claimed limitations of group I, in which the telephone gateway 107 is supported by media gateway 302 which is connected to the PSTN via a digital switch (not shown), or a Voice over Internet Protocol (VoIP) telephone that is connected to the PSTN via a data network. As shown in Fig. 3, a VOIP gateway (VOIP GW) for performing protocol conversion is installed at a border between the IP network and the existing circuit switch network. When both or one of terminals for the call is a terminal compatible with the circuit switch network (for example, a PSTN-compatible telephone), protocol conversion between the circuit switch network and the IP network is performed at the VOIP gateway (for example, conversion between an analog voice signal and an IP voice packet). Typically, the VoIP gateway includes a subscriber line connector, and a switch for connecting between subscribers who are connected through lines based on address associated with the information data. To facilitate call routing in such VoIP environments, originating and terminating switches (not shown) can be connected to PSTN/IP gateways that belong to both the IP network and the PSTN. Based on the called number or other signaling indicator, the switches route certain calls through the IP gateways instead of the PSTN. It is widely known in the art that Session Initiation Protocol (SIP) telephony is commonly used to establish the call set-up process. SIP is the predominant IETF standard and it is the chosen signaling protocol for upcoming 3GPP and 3GPP2 all-IP networks. Applicant further alleged that not one of the group II includes the features related to a "device for interconnecting two or more networks at a

Art Unit: 2616

media access level of a data link layer". However, independent claims 42, 54 and 66-67 (group II) drawn to the bridge or gateway between networks (PSTN and IP) utilizing application server as the media access level for establishing a session with the network interface (see also Fig. 3 of the present application, specification, page 11 plus).

Based on the analyzing as above, the inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II which has separate utility such as an application server as the media access level for establishing a session with the network interface, which does not include the particular listed of the invention I, such as method for automated interaction with users participating in the calls using network server in communication with the IP network medium. See MPEP '806.05(d). Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Applicant's argument with respect to the rejected claims 1, 6, 22, 29 (pages 21-24) that the cited reference does not show or suggest "where the call is transmitted as a data stream of uncompressed data from the gateway to the network server" and "located in close physical proximity to the PSTN-to-IP gateway" and "to allow or disallow the calls based on a telephone number associated with the calls". However, the features upon which applicant relies have no support in the original disclosure. Furthermore, Fig. 3 is

best described for claim 1, and the drawings must show every feature of the invention specified in the claims. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). However, newly added limitations have not shown in the drawings. Therefore, the newly added feature(s) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

Claim Rejections - 35 U.S.C. 112, first paragraph

4. Claims 1, 6, 22, 29 and 68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitations: "wherein the call is transmitted as a data stream of uncompressed data from the gateway to the network server" and "located in close physical proximity to the PSTN-to-IP gateway" and "to allow or disallow the calls based on a telephone number associated with the calls" have no support in the disclosure.

Election by Original Presentation

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-41 drawn to the Combined circuit switching and packet switching:

 Subject matter wherein the switching network has both (a) a switch which
 establishes a path between a source and destination with the path being held for
 the duration of the communication, and (b) a switch which routes information
 based on an address associated with the information data in a channel which is
 only occupied for a duration of the time required to transmit the information data
 and the associated address. Classified in class 370, subclass 352.
- II. Claims 42-66 drawn to the Bridge or gateway between networks: Subject matter having a device for interconnecting two or more networks at a media-access level of a data-link layer. Having a plurality of nodes performing distributed switching: Subject matter having a switching architecture in which a plurality of switch nodes are provided such that the switching function is spread out over a geographical area, wherein information data to be switched is organized with one or more bytes preceded by an identification information indicative of a source or destination station. Classified in class 370, subclass 401.
- 6. Newly submitted claims 42-66 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Inventions I and II are related as subcombinations disclosed as usable together in a single combination.

 The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II which has separate utility such as an application

Art Unit: 2616

server as the media access level for establishing a session with the network interface, which does not include the particular listed of the invention I, such as method for automated interaction with users participating in the calls using network server in communication with the IP network medium. See MPEP '806.05(d). Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Page 7

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 42-66 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Claim Rejections - 35 USC ' 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claims 1, 6, 16-19, 22, 27-31, 34-35 and 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aldous et al. (US#6,654,722) in view of Subramaniam et al. (US#6,070,187).

With respect to claims 1, 6, 22, 29 and 67-68, Aldous et al. disclose in Figs. 1 & 2 block diagrams illustrated a VoIP based speech system for servicing a call received over a PSTN comprising: a PSTN-to-IP gateway 3 for connecting to the PSTN 2; an IP network medium 4 connected to the gateway; and a network server 7 in communication

Art Unit: 2616

with the IP network medium 4 for automated interaction with a user 1 participating in the call (Col. 5, lines 20 plus). Aldous further teaches in Fig. 2 illustrated more detail of the VoIP telephony gateway server 3, in which the VoIP gatekeeper 14 (*proxy server functionality*) can perform load balancing in order to ensure the high availability of VoIP enabled speech servers 5 (*plurality of network servers*) able to receive the voice call (Col. 5, line 59 to Col. 6, line 18).

Aldous et al. does not disclose expressly the configuration server and call discrimination in forwarding the packet switched call. However, Aldous teaches a VoIPbased speech system, in which a VoIP telephony gateway server; at least one speech server, each speech server containing a VoIP-enabled speech application; a VoIPcompliant call control interface between the VoIP telephony gateway server and the speech server; and, a VoIP communications path between the VoIP telephony gatewayserver and the speech application in the at least one speech server (providing automated dynamic management of the network server). In the VoIP-based speech system, the VoIP telephony gateway server and the speech application can establish the VoIP communications path through the VoIP-compliant call control interface (see Fig. 2; Col. 2, lines 35 plus). In the same field of endeavor, Submaramaniam et al. (US#6,070,187) discloses a method and apparatus that allows a network node to be automatically configured with an IP address and a default gateway address to be configured as its own gateway. The configuration agent resides on a network device (such as a switch or bridge) that is coupled to two network segments, with one network segments including a node to be configured and another network segment including a server capable of automatically

Art Unit: 2616

providing configuration parameters. The configuration agent acts as a snoopy agent. Messages from the configuration server to the node to be configured are "snooped" to discover messages containing an IP address and a default gateway address. Such messages are altered to copy the IP addresses offered to the nodes seeking configuration to the default gateway addresses, and the messages are sent on their way, thereby causing nodes seeking to be configured to be configured as their own default gateway. In some configurations, messages from the node to be configured to the configuration server are altered to ensure that messages from the configuration server to the node seeking to be configured are broadcast messages (See Figs. 3, 6; Col. 6, lines 25 plus).

Although Aldous et al. and Subbramaniam do not specifically refer to the *blasting* process in providing automated dynamic management of the network server. This blasting process is well known in the art and are widely known in the communication management functions for providing user notification and connectivity to handle the access to the system resources. As shown in Fig. 2, Aldous et al. teaches a block diagram illustrated the architecture for the VoIP telephony gateway server of Fig. 1, in which advance call management module 15 is provided to implement (alone or in conjunction with other modules) management functions required to permit use of the system by content providers and subscribers, as well as process the blasts transmitted through the system. For example, server management module 15 is programmed to permit creation, deletion, distribution, tracking, and logging of data pertinent to blasts processed by server 14 (Col. 6, lines 20 plus).

Regarding claims 16-19, 27-28 and 30-31, 34, 35, Subbramaniam further teach in

Art Unit: 2616

Figs. 7-10 the flow charts illustrated how the DHCP proxy agent of Fig. 6 processes packets in VoIP communications. At block 138, a packet is received. Control then passes to decision block 140, which determines whether the packet is a DHCPDISCOVER, DHCPREQUEST, DHCPOFFER, DHCPACK, or DHCPNAK packet specifying a network node to be configured as its own gateway. Similar to DHCP snoopy agent 102 as described above, proxy agent 120 can also be configured to maintain a table of MAC addresses identifying network nodes that are to be "helped". If the packet is not one of these packets, or the node is not configured to be "helped", the "NO" branch is taken to block 142, where the packet is transmitted. Control then passes back to block 138 to wait for the next packet to be received. Note that DHCP proxy agent 130 is configured to receive all broadcast packets transmitted in the configuration dialogue. In addition, if any of the packets are from the client are unicast, agent 130 will also receive those packets since the client seeking to be configured will believe that agent 130 is its DHCP server (Col. 12, lines 62 plus).

One skilled in the art would have recognized the need for effectively and efficiently using VoIP enabled speech server for communicating information, and would have applied Subramaniam's novel use of the configuration server in VoIP into Aldous's teaching of the VoIP enabled speech server. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Subramaniam's method and apparatus for configurating a network node to be its own gateway into Aldous's voice over IP protocol based speech system with the motivation being to provide a method and system for supporting voice activated services over a

Art Unit: 2616

telephone interface.

10. Claims 2-5, 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aldous et al. (US#6,654,722) in view Subramaniam et al. (US#6,070,187) as applied to the claims above, and further in view of of Brown et al. (US#6,604,075).

With respect to claim 2, Aldous and Subramaniam disclose the claimed limitations as discussed in the paragraph 9 above. In the same field of the endeavor Brown et al. (US#6,604,075) discloses a novel method and system for use in communicating information in VoIP using a web-based voice dialog interface, according to the essential features of the claims. Brown provides an Interactive Voice Response (IVR) platform which includes a speech synthesizer, a grammar generator and a speech recognizer. The speech synthesizer generates speech, which characterizes the structure and content of a web page retrieved over the network. The speech is delivered to a user via a telephone or other type of audio interface device. The grammar generator utilizes textual information parsed from the retrieved web page to produce a grammar. The grammar is then supplied to the speech recognizer and used to interpret voice commands generated by the user. The grammar may also be utilized by the speech synthesizer to create phonetic information, such that similar phonemes are used in both the speech recognizer and the speech synthesizer (Col. 2, lines 36 plus).

With respect to claims 3-5 and 7-8, Aldous teaches a method for coupling a speech application to a telephony gateway server in a VoIP network. Notably, as shown in Fig. 1 of the preferred embodiment, the VoIP Enabled Speech Server 5 can accept

voice commands originating in the telephone device 1 for retrieving Web content from a Web server 7 in a data communications network 6. Specifically, the Web content 8 can be a VoiceXML document 8. In response, the VoIP Enabled Speech Server 5 can retrieve the VoiceXML document 8 from the Web server 7 and can synthesize audio data according to instructions contained in the VoiceXML document 8. Subsequently, the synthesized audio data can be transported across the VoIP network 4 to the VoIP telephony gateway server 3 and ultimately to the telephone device 1 (Col. 5, lines 47 plus). Aldous further teaches several well-known protocols implement the VoIP protocol specification including H.323, Session Initialization Protocol ("SIP") and Master Gateway Control Protocol ("MGCP"), upon which voice traffic can be transmitted across IP networks. In a VoIP network, analog speech signals received from an analog speech audio source, for example a PSTN or a microphone, are digitized, compressed and translated into IP packets for transmission over an IP network (Col. 1, lines 34-45).

One skilled in the art would have recognized the need for effectively and efficiently using VoIP enabled speech server for communicating information, and would have applied Brown's teaching of the speech synthesizer, a grammar generator and a speech recognizer in VoIP into Subramaniam's novel use of the configuration server in VoIP and Aldous's teaching of the VoIP enabled speech server. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Brown's web-based voice dialog interface into Subramaniam's method and apparatus for configuring a network node to be its own gateway and Aldous's voice over

Art Unit: 2616

IP protocol based speech system with the motivation being to provide a method and system for supporting voice activated services over a telephone interface.

Allowable Subject Matter

11. Claims 36-41 are allowable

Claims 20-21, 25-26 and 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein the if the proxy server detects that a number of calls exceeds a predetermined threshold, then the proxy server follows at least one predetermined call routing rule provided by the configuration server, as specifically recited in the claims 20, 25, 32 and 36-41.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION THIS ACTION IS MADE FINAL**. See MPEP '706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2616

TWO MONTHS of the mailing date of this final action and the advisory action is not

Page 15

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Man U. Phan whose telephone number is (571) 272-3149.

The examiner can normally be reached Monday through Friday from 6:00 am to 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wellington Chin, can be reached on (571) 272-3134. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone number is (571)

272-2600.

Mphan

07/20/2006.

Man u Man MAN U PHAN PRIMARY EXAMINER